Revision of the genus Spilosoma *and the allied groups of the Family* Arctiidæ; *by* ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

The genera of *Arctiidæ* into which *Spilosoma* has been divided are closely allied; their structural differences are such as would not be recognized in many families as of generic value; still, as sub-divisions of a large group of insects, they are useful, and on that account I adopt them.

The following species do not belong to this group of genera.—*Spilosoma marmorata*, which is a *Digama* (a genus probably allied to *Deiopeia*); *S. rubescens*, which is congeneric with *Arctia strigatula*; *S. submacula*, *obscurum*, and *Aloa rhodophaea*, which will together form a genus not far from *Alope; S. fulvia* which seems to me to be a mutilated *Hypsa*; *S. costata*, something like the latter and of doubtful location; *Aloa tripartita*, *dentata*, and *erosa*; and *Creatonotos ? vuteria.*

Spilosoma dilecta, Boisd. may be anything, it cannot, I think, belong to the group.

Genus AREAS. *Walker.*

Areas imperialis.

Euprepia imperialis, Kollar, Hügel's Kaschmir, p. 466, pl. 21, fig. 1, (1848).

Himalayas. B.M.

Walker refers this species to *Hypercompa*, but I am satisfied that its true position is in *Areas*, notwithstanding the startling differences in the pattern of the primaries.

Areas orientalis.

Areas orientalis, Walker, Lep. Het. 3, p. 658, n. 1, (1855). Saráwak (*Wallace*), Java (*Horsfield*).

N. India, Silhet. B.M.

Areas melanopsis.

Arctia melanopsis, Walker, Lep. Het. supp. 1, p. 280, (1864).
Ceylon. B.M.

Areas delineata.

Aloa delineata, Walker, Lep. Het., p. 700, n. 3, (1855).
Natal, S. Africa. B.M.

Areas lutescens.

♂, ♀. *Spilosoma lutescens*, Walker, Lep. Het. 3, p. 672, n. 16, (1855).

♂. *Halesidota mundata*, Walker, Lep. Het. supp. 1, p. 309, (1864).

Sierra Leone, Natal, S. Africa. B.M.

Areas lactinea.

Phalæna lactinea, Cramer, Pap. Exot. II, pl. 131, fig. D, (1779).

Bombyx sanguinolenta, Fabricius, Ent. Syst. III, 1, p. 473, n. 206, (1793).

N. India, Moulmein, Ceylon, Java. B.M.

Areas cardinalis, n. sp.

♀. Snow-white; crest, margin of collar, abdomen and costa of primaries scarlet; antennæ black; pterygodes with a central black spot; abdomen with dorsal and lateral series of black spots; primaries with two black spots at end of cell, one at the upper and the other (smaller) at the lower extremity; secondaries with end of cell, a large trifid marginal anal patch, and a subquadrate smaller patch at centre of outer margin, all black; palpi scarlet with black tips, coxæ and upper surface of femora scarlet, tarsi blackish; venter sordid white with lateral black spots; primaries with only one black spot at end of cell, otherwise as above; secondaries with the base red, a sub-basal costal black spot, otherwise as above: expanse of wings 3 inches, 1 line.

Phillipine Islands, (*Cuming*). B.M.

Easily distinguished from *A. lactinea* by its scarlet abdomen, and the large black marginal patches of secondaries.

Areas roseicostis, n. sp.

♂. Snow-white; crest, a few scales on margin of collar, abdomen, costa of primaries, and a diffused costal nebula on secondaries, scarlet; antennæ black; abdomen with a dorsal series of transverse black bars, and lateral series of spots; primaries with a minute black litura on median nervure at origin of second and third branches, a second upon the lower radial, a third on the first median, and a fourth near the end of the submedian nervure; secondaries with a black spot at end of cell, a second smaller one at apex, and three (larger) along the outer margin; palpi scarlet with black tips; coxæ and upper surface of femora scarlet; knees, tibiæ above, and tarsi black; venter white with lateral black dots; primaries with two black spots at end of cell; secondaries with the base rosy, a black sub-basal costal spot; costal rosy nebula only visible through the wing, otherwise as above: expanse of wings 1 inch, 11 lines.

Rockingham Bay, Australia, (*Macgillivray*). B.M.

Areas Moorei, n. sp.

♂. Snow-white; scape of antennæ, front margin of collar, abdomen, and costa of primaries, scarlet; antennæ black; abdomen with a dorsal series of transverse black bars, and lateral series of black dots; primaries with two minute black points at end of cell; secondaries with a black spot at end of cell, a second at apex, and a third, submarginal, on discoidal interspace; palpi scarlet, fringed with white, with black tips; coxæ and femora above reddish, knees and middle tibiæ above black, tarsi black spotted with whitish; wings below red at base with a black costal spot, otherwise as above: expanse of wings 1 inch, 6 lines.

Almorah, N. India, (*Boys*). B.M.

This species, like the two preceding is at once separated from *A. lactinea* by its scarlet abdomen; it also has much less scarlet about the collar, and no black spots on the tegulæ: I have named it after Mr. F. Moore of the E. India Museum.

Areas costalis.

Aloa costalis, Walker, Lep. Het. supp. 1, p. 301, (1864).
N. Australia.

Areas marginata.

Bombyx marginata, Donovan, Ins. New Holland, pl. 34, fig. 2, (1805).
Tasmania, (*Doubleday*). B.M.

If the species which we possess is that represented by Donovan, his figure must be very bad.

Genus ALOA. *Walker.*

Aloa punctistriga.

♀. *Spilosoma punctistriga*, Walker, Lep. Het. 3, p. 676, n. 28, (1855).
N. India. B.M.

Aloa candidula.

♂. *Aloa candidula*, Walker, Lep. Het. 3, p. 704, n. 7, (1855).
Nepaul, (*Hardwicke*). B.M.

Possibly the male of the preceding species.

Aloa diminuta.

♂. *Aloa diminuta*, Walker, Lep. Het. 3, p. 705, n. 8, (1855).
♀. *Creatonotos emittens* ♀, Walker, Lep. Het. 3, p. 639, n. 2, (1855).
Spilosoma strigata, Walker, Charact. Lep. Het, p. 10, n. 15, (1869).
N. India, (*Hamilton and James*). B.M.

Aloa rubricosta.

Creatonotos rubricosta, Moore, Proc. Zool. Soc., p. 573, (1872).
Manpuri, N.W. India, (*Horne*), Bombay. Coll. F. Moore.

This species seems to be nearly allied to *A. punctistriga.*

Aloa emittens.

♂, ♀. *Creatonotos emittens*, Walker, Lep. Het. 3, p. 638, n. 2, (1855).
♂. *Aloa candidula, var.* Walker, l. c., p. 704, n. 7, (1855).
Ceylon, (*Templeton and Wenham*). B.M.

♂, ♀ *variety.* Altogether more rosy in colour with a prominent black spot at end of discoidal cell of secondaries.

S. India. B.M.

Aloa punctivitta.

Spilosoma ? punctivitta, Walker, Lep. Het. 3, p. 673, n. 18, (1855).

Port Natal, (*Gueinzius*). B.M.

Creatonotos interruptus being congeneric with *Aloa integra, bivittata,* &c., the name *Creatonotos* must be referred to them; and thus *Aloa candidula* will become the type of *Aloa* Walker. In *Aloa* thus restricted the antennæ of the sexes differ, in *C. interruptus* they are alike, it will not come into the *Spilosoma* group.

Genus SEIRARCTIA. *Packard.*

Seirarctia innotata.

Spilosoma innotata, Walker, Lep. Het. 3, p. 674, n. 20, (1855).

Egypt, (*Burton*). B.M.

Seirarctia scita.

Aloa scita, Walker, Lep. Het. supp. 1, p. 302, (1864).

Sierra Leone, (*Foxcroft*). B.M.

Seirarctia echo.

Phalæna echo, Smith and Abbot, Ins. Georg., p. 135, pl. 68, (1797).

Hyphantria echo, Clemens, Proc. Acad. Nat. Sci. Phil., p. 531, (1860).

Spilosoma echo, Morris, Syn. Lep. N. Am. App., p. 342, (1860).

Georgia.

Seirarctia clio.

Seirarctia clio, Packard, Proc. Ent. Soc. Phil. 3, p. 120, (1864); Stretch, Ill. Zyg., and Bomb. N. Am. 1, p. 82, pl. 3, fig. 1, (1872).

California. Coll. Dr. Behr.

Seirarctia trivitta.

Spilosoma? trivitta, Walker, Lep. Het. 3, p. 673, n. 19, (1855).
Port Natal, (*Gueinzius*). B.M.

Seirarctia quadriramosa.

Euprepia quadriramosa, Kollar, Hügel's Kaschmir, p. 468, n. VI, (1848).
N. India. B.M.

Genus LACYDES. *Walker.*

Lacydes spectabilis.

Chelonia spectabilis, Tauscher, Mém Mosc., p. 212, T. 13, 6, (1806); Ménétries, Enum. corp. anim. III, pl. 18, fig. 3, a and b, (*larva*), (1863).
Bombyx intercisa, Freyer, Neuere Beitr. Schmett. IV, p. 118, pl. 356.
Europe. B. M.

African sub-genus, with shorter palpi.

Lacydes vocula.

Bombyx vocula, Stoll. supp. Cramer, pl. 31, fig. 5.
S. Africa, (*Shepherd*), Knysna, (*Trimen*). B.M.

Lacydes ramivitta, (? vocula var.)

♂. *Spilosoma ramivitta*, Walker, Tr. N. H. Soc. Glasgow, 1, p. 337, (1873).
Congo.

Lacydes arborifera, n. sp.

♂. Snow-white, back of head and collar, and base of abdomen testaceous, abdomen ochreous; a brown longitudinal streak on pterygodes, and another on centre of thorax; abdomen with dorsal and lateral series of black dots; antennæ whitish testaceous; primaries with an irregular apical-costal olivaceous-brown streak, a central longitudinal streak of the same colour, forking from below at first median branch and trifurcate from origin of second and third median branches to outer margin; a third streak along the sub-median nervure; secondaries with a black dot at end of cell; venter testaceous; costa of primaries below testaceous; otherwise as above: expanse of wings 1 inch, 1 to 2 lines.

Loanda, August, 1872; Ambriz, October, 1872; (*Monteiro*). B.M.

Allied to *L. vocula*, but much less marked with brown than in any examples of that species, also smaller and paler in colouring.

Lacydes lineata.[*]

♀. *Spilosoma linea*, Walker, Lep. Het. 3, p. 671, n. 12, (1855).

♂. *Spilosoma dorsalis*, Walker, l. c. n. 13, (1855).

♂. *Spilosoma strigatum*, Wallengren, Wien. Ent. Monatschr. 4, p. 161, n. 5, (1860); Kongl. Svensk. Akad. Handl. 5, p. 49, n. 2, (1865).

Var. ♀ ? *Spilosoma truncatum*, Walker, Lep. Het. 7, p. 1781, (1856).

S. Africa, (*Argent and Smith*), Natal, (*Gueinzius*), Cape, (*Drege*). B.M.

The example mentioned as coming from West Africa is generically distinct.

Genus EPILACYDES, *n. gen.*

Differs from the preceding genus in its altogether less woolly thorax, and from the African section in its much longer palpi. Type *E. simulans*.

Epilacydes simulans, n. sp.

♂. In appearance very like *Lacydes lineata* ♀, but altogether paler in colour, with no bifurcate termination to the median streak of primaries; thorax narrower.

Head pale stramineous, brownish in front; antennæ black; palpi black above, whity-brown below; collar and thorax stramineous, the latter with a dorsal black streak; abdomen golden orange with dorsal black spots and lateral black points; primaries silky stramineous with a black streak, slightly widening from base, along median nervure, to near centre of lower discoidal interspace; secondaries creamy whitish; wings below creamy white, yellowish along costa; pectus and venter stramineous: expanse of wings 1 inch, 5 lines.

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[*] This is evidently more correct than *linea*, but if preferred the name *dorsalis* may be adopted.

West Africa. B.M.

Genus ALPHÆA. *Walker.*

Alphaea fulvohirta.

Alphaea fulvohirta, Walker, Lep. Het. 3, p. 684, n. 1, (1855).
Darjeeling. B.M.

Alphaea varia of Walker appears to me to be referable to the genus *Ardices.*

Genus ARDICES. *Walker.*

Ardices fulvohirta.

♂, ♀. *Ardices fulvohirta* ♂, Walker, Lep. Het. 3, p. 710, n. 1, (1855).
♀. *Spilosoma conferta*, Walker, l. c. supp. 1, p. 295, (1864).
Tasmania. B.M.

Ardices subocellata.

♀. *Spilosoma subocellatum*, Walker, Lep. Het. 7, p. 1697, (1856).
♂, ♀. *Ardices fulvohirta*, ♀, Walker, Lep. Het. 3, p. 710, n. 1, (1855).
Tasmania, S. Australia, W. Australia, Kangaroo Island. B.M.

The typical form of this species is less heavily marked than the bulk of the examples formerly placed as females of *A. fulvohirta*, but it is clearly only a case of variation: as indicated by Walker, this species chiefly differs from the preceding in its scarlet abdomen, femora, and lateral margin of collar.

Ardices divisa.

Arctia divisa, Walker, Lep. Het. 3, p. 614, n. 39, (1855).
Himalayas. B.M.

This species was retained in *Arctia*, by Mr. Moore, probably on account of a tendency which it exhibits to follow the pattern of *A. imbuta*, Walker, next to which species both authors place it; the latter however seems to me to be better located in *Pericallia*: *A. divisa* is without question the Indian representative of *Ardices fulvohirta*, and differs considerably from *Arctia* in the character of its palpi.

Ardices liturata.

Ardices liturata, Walker, Charact. Lep. Het., p. 12, n. 19, (1869).

Had it not been for the mention of blackish hindwings, I should have supposed this to be a faded example of *A. subocellata*.

Ardices canescens, n. sp.

White; front margin of thorax scarlet; antennæ black; abdomen scarlet with dorsal and lateral series of black dots; primaries with a small spot on interno-basal area, a short oblique band across the middle of the cell, a sub-costal spot at end of cell, a band upon disc from costa to inner margin, (trifurcate at costa and bifurcate towards inner margin), and three or four bifid submarginal spots, olivaceous brown; all the markings intersected by white nervures; base of costal margin blackish; secondaries with a spot at end of cell, a second near apex, and a streak at anal angle, olive brown; palpi scarlet with black tips, a fringe of scarlet scales round the eyes; side of coxæ, tibiæ, and tarsi, blackish; venter creamy whitish: expanse of wings 1 inch, 10 lines.

Australia, (*Brenchley*). B.M.

Possibly an extreme variety of *A. subocellata*, but with the wings much less heavily marked, and without any black streaks on the pterygodes and thorax.

Ardices? varia.

Alphæa varia, Walker, Lep. Het. supp. 1, p. 297, (1864).
Massuri, (*Hearsay*). B.M.

Genus ICAMBOSIDA. *Walker.*

Icambosida nigrifrons.

Icambosida nigrifrons, Walker, Lep. Het. supp. 2, p. 401, (1865).
Darjeeling, (*Atkinson*). B.M.

I do not consider this to be congeneric with *Spilosoma*, as suggested by Mr. Moore in 1875; as these genera go, it is sufficiently distinct to be kept separate.

Genus Spilosoma. *Stephens.*

Spilosoma menthastri.

Bombyx menthastri, Esper, Eur. Schmett., pl. 66, figs. 6–10, (1786).
Phalæna lubricipeda, Linnæus, Syst. Nat. II, p. 829, n. 69, (1766).
Phalæna erminea, Marsham, Linn. Trans. 1, p. 70, pl. 1, fig. 1.
Bombyx mendica, Rossi, Faun. Etr. II, p. 174, n. 1093.
var. *Spilosoma Walkerii*, Curtis, Brit. Ent. II, pl. 92.
var. *Chelonia Luxerii*, Godart, Hist. Nat. Lep. Fr. IV, p. 37, n. 4.
Europe, (*Becker*). B.M.

Spilosoma punctarium.

Phalæna Bombyx punctaria, Cramer, Pap. Exot. IV, p. 233, pl. 398, fig. D, (1782).
Hakodadi, (*Whitely*). B.M.

Spilosoma sangaica.

Spilosoma sangaica, Walker, Lep. Het. supp. 1, p. 294, (1864).
Shanghai. B.M.

Spilosoma punctulatum.

Spilosoma punctulatum, Wallengren, Wien. Ent. Monatschr. 4, p. 161, n. 5, (1860); Kongl. Svenska, Vetensk. Akad. Handl. 5, p. 49, n. 1, (1865).
Interior of Caffraria.

Allied to *S. menthastri.*

Spilosoma urticæ.

Bombyx urticæ, Esper, Eur. Schmett. III, p. 20, pl. 83, fig. 2, (1789).
Phalæna papyratia, Marsham, Linn. Trans. 1, p. 72, pl. 1, fig. 4, (1791).
Europe, (*Becker*). B.M.

Spilosoma ? mutans.

Spilosoma mutans, Walker, Lep. Het. 7, p. 1697, (1856).

Hab. ? Coll. Hope, Oxford.

Spilosoma ? melanostigma.

Spilosoma melanostigma, Erschoff, Horæ Soc. Ent. Ross. VIII, p. 316, (1872).

Turan.

Unfortunately the work in which this species is described is not in the Museum Library, so that I have been unable to identify it: if Erschoff follows Staudinger, it may be *Phragmatobia*, or any other genus of *Arctiidæ*.

Spilosoma virginica.

Bombyx virginica, Fabricius, Ent. Syst. supp., p. 437, (1798).

Spilosoma virginica, Walker, Lep. Het. 3, p. 668, n. 6, (1855); Riley, 3rd. Rep. Ins. Mo., p. 68, figs. 28, a–c, (1871); Stretch, Ill. Zyg., and Bomb. N. Am. 1, p. 131, pl. 6, fig. 6, (1872).

Trenton Falls, Hudson's Bay, Nova Scotia, Georgia, Massachusetts. B.M.

Spilosoma latipennis.

♀. *Spilosoma latipennis*, Stretch, Ill. Zyg., and Bomb. N. Am. 1, p. 133, pl. 6, fig. 5, (1872).

Atlantic States, (*Angus*). Coll. Stretch.

Spilosoma vestalis.

Spilosoma vestalis, Packard, Proc. Ent Soc. Phil. 3, p. 125, (1864); Stretch, Ill. Zyg., and Bomb. N. Am. 1, p. 133; pl. 6, figs. 7, 8, (1872).

California, (Presented by Mr. Stretch, 1875). B.M.

Section DIONYCHOPUS, (*Hübner*), *Schrenck.*

Dionychopus albus.

Chelonia alba, Bremer, Beitr. Schmett. Fauna. Nordl. China's, p. 15, n. 71, (1853).

N. China.

Dionychopus niveus.

Dionychopus niveus, Ménétriés, Bull. de l'Acad. St. Petersb. XVII, p. 218, n. 23; Schrenck's, Amur-Lande, p. 52, pl. IV, fig. 6, (1859).

♀. Japan, (*Pryer and Whitely*). B.M.

The published figure of this species is very poor, but the description puts its correct identification beyond question.

Dionychopus? erythrozona.

Euprepia erythrozona, Kollar, Hügel's Kaschmir, p. 468, n. VII, (1848).

Massuri.

Genus SÆNURA. *Wallengren.*

Sænura lineata.

Spilosoma lineata, Walker, Lep. Het. 3, p. 672, n. 17, (1855).

Aloa simplex, Walker, l. c., p. 699, n. 1, (1855).

Sænura alba, Wallengren, Wien. Ent. Monatschr. 4, p. 162, n. 8, (1860); Kongl. Svenska. Veten. Akad. Handl. 5, p. 49, n. 1, (1865).

Natal. B.M.

Sænura flava.

Sænura flava, Wallengren, Wien. Ent. Monatschr. 4, p. 162, n. 9, (1860); Kongl. Svensk. Akad. Handl. 5, p. 49, n. 2, (1865).

Caffraria.

Genus HYPHANTRIA. *Harris.*

This genus is very close to *Spilosoma.*

Hyphantria cunea.

Bombyx cunea, Drury, Ill. Ex. Ent. 1, p. 36, pl. 18, fig. 4, (1770).

Hyphantria cunea, Fitch, 3rd. Rep. Ins. N. York, p. 384, (1856); Stretch, Ill. Zyg. and Bomb. N. Am. 1, p. 205, pl. 8, figs. 18–20, (1874).

Phalæna punctatissima, Smith and Abbot, Lep. Ins. Georg., p. 139, pl. 77, (1797).

Hyphantria punctatissima, Harris, Ins. Inj. Veg., 3rd. ed., p. 358, (1862).

United States. Georgia. B.M.

Hyphantria congrua.

Spilosoma congrua, Walker, Lep. Het. 3, p. 669, n. 8, (1855).
Georgia, (*Milne*). B.M.

The only examples now representing this species in the collection are what I believe to be a male variety of *H. cunea*, and a female? *Spilosoma virginica*, without abdomen; what Mr. Walker may have done with the species since Mr. Grote described it, it is impossible to say.

Hyphantria textor.

Arctia textor, Harris, Cat. Ins. Mass., (Hitchcock's Rt., p. 591), (1833).
Hyphantria textor, Harris, Ins. Inj. Veg., p. 255, (1841); Riley, 3rd. Rep. Ins. Missouri, p. 130, figs. 55, a–c, (1871); Stretch, Ill. Zyg., and Bomb. N. Am. 1, p. 206. pl. 8, fig. 21, (1874).
Georgia, (*Abbot*), Sp. ead.? Texas. B.M.

Hyphantria candida, (?præc. var.).

Spilosoma candida, Walker, Lep. Het. supp. 1, p. 291, (1864).
Hyphantria textor, Grote, Trans. Am. Ent. Soc., p. 18, (1867).
N. America. B.M.

If Mr. Walker has rightly identified *H. textor*, (as Mr. Stretch tacitly admits); the *S. candida* of the supplement is a decidedly larger and more woolly insect: still Mr. Grote may be correct in considering the two forms con-specific.

Hyphantria punctata.

Hyphantria punctata, Fitch, 3rd. Rep. Ins. N. York, p. 387, (1856); Stretch, Ill. Zyg., and Bomb. N. Am. 1, p. 204, (1874).
United States. B.M.

I believe this to be only a variety of *H. cunea*, with which all the white examples (♂ and ♀) must be associated; it differs from the typical form in only possessing one series of black spots on primaries, there is however an intermediate form with only the two central series prominent, whilst the typical form has four series on primaries and one on secondaries.

Genus ALPENUS. *Walker.*

Alpenus maculosus.

Phalæno-Bombyx maculosa, Cramer, Pap. Exot. IV, p. 156, pl. 370, fig. D, (1782).

Spilosoma ? maculosum, Walker, Lep. Het. 7, p. 1696, (1856).

Ecpantheria assimilis, Hübner, Verz. Bek. Schmett, p. 183, n. 1890, (1816).

Sierra Leone, (*Foxcroft*). ♂, ♀. B.M.

Alpenus æqualis.

♀. *Alpenus æqualis,* Walker, Lep. Het. 3, p. 686, n. 1, (1855).

♀. *Ecpantheria indeterminata,* Walker, l. c., p. 697, (1855).

Halesidota ? macularia, Walker, Lep. Het. supp. 1, p. 314, (1864).

W. Africa, Ashanti, Congo. ♀, B.M.

Clearly a local form of the preceding species, it chiefly differs in having several large black sub-marginal spots in secondaries.

Alpenus marginalis.

♀. *Aloa marginalis.* Walker, Lep. Het. 3, p. 701, n.4, (1855).

Sierra Leone, (*Morgan*). B.M.

Alpenus multiguttatus.

Hypercompa multiguttata, Walker, Lep. Het. 3, p. 657, n. 20, (1855).

Nepal, (*Hardwicke*). B.M.

Alpenus spilosomoides.

Deiopeia spilosomoides, Walker, Lep. Het. supp. 1, p. 263, (1864).

N. India. (*Strachey*). B.M.

Probably this will turn out to be merely a dwarfed form of the preceding species.

Alpenus maculifascia.

♀. *Spilosoma maculifascia,* Walker, Lep. Het. 3, p. 676, n. 29, (1855).

♂. *Spilosoma canspurcatum*, Walker, l. c. 7, p. 1698, (1856).
Java, (*Horsfield*). B.M.

Alpenus bifurca.

Aloa bifurca, Walker, Lep. Het. 3, p. 700, n. 2, (1855).
Sierra Leone, (*Morgan*). B.M.

Genus EYRALPENUS, *n. gen.*

Allied to *Alpenus* and *Spilarctia*, but differing from the former in its broad and short wings, more prominent thorax and stouter legs, and from the latter in its less pointed primaries, with less oblique outer margin and its shorter antennæ. Type *E. testaceus.*

Eyralpenus testaceus.

Spilosoma testacea, Walker, Lep. Het. 3, p. 670, n. 11, (1855).
Spilosoma subflavescens, Walker, l. c. supp. 1, p. 293, (1864).
Natal, (*Gueinzius*). Zoolu, (*Angas*). B.M.

Genus LEUCARCTIA. *Packard.*

Leucarctia acrea.

♀. *Bombyx acrea*, Drury, Ill. Ex. Ent. 1, pl. III, fig. 2, (1770).

♂. *Bombyx caprotina*, Drury, l. c., fig. 3, (1770); Cramer, Pap. Exot. III, pl. CCLXXXVII, fig. C, (1782).

♂, ♀. *Phalæna aeria*, (sic.), Smith and Abbot, Lep. Ins. Georg., p. 133, pl. LXVII, (1797).

Arctia pseuderminea, Harris, Mass. Ag. Rep., p. 332, pl. 1, (1823).

Leucarctia acræa, Packard, Proc. Ent. Soc. Phil. 3, p. 124, (1864); Stretch, Ill. Zyg., and Bomb. N. Am. 1, p. 99, pl. 4, fig. 1–3; pl. 10, fig. 6, (1872).

New York, Georgia, British Columbia, Canada, Mexico. B.M.

Leucarctia mexicana.

Spilosoma mexicana, Walker, Lep. Het. supp. 1, p. 291, (1864).
Oaxaca, (*Sallé*). B.M.

Leucarctia californica.

Leucarctia californica, Packard, Proc. Ent. Soc. Phil. 3, p. 125, (1864).

San Francisco.

Leucarctia albida.

♂. *Leucarctia albida*, Stretch, Ill. Zyg., and Bomb. N. Am. 1, p. 203, pl. 8, fig. 22, (1874).

California. Coll. Stretch.

Judging from the figure alone, I am at a loss to know how this species differs from *Spilosoma virginica*; however, I have little doubt that Mr. Stretch has found it structurally different; the head seems rather prominent and too broad for that species.

Leucarctia permaculata.

Leucarctia permaculata, Packard, Rep. Peab. Acad. IV, p. 86, (1872).

S. California.

Genus PHISSAMA. *Moore.*

Phissama albistriga.

Aloa albistriga, Walker, Lep. Het. supp. 1, p. 303, (1864).

S. India, (*Walhouse*). B.M.

Phissæma transiens.

Spilosoma transiens, Walker, Lep. Het. III, p. 675, n. 22, (1855).

Aloa isabellina, Walker, Lep. Het. III, p. 705, n. 10, (1855).

Silhet, Moulmein, Sarawak, Celebes. B.M.

Phissama vacillans.

Amphissa vacillans, Walker, Lep. Het. 3, p. 685, n. 1, (1855).

Aloa vacillans, Walker, l. c. 7, p. 1702, (1856).

Borneo, Philippines, Hong-Kong. B.M.

Genus EUCHÆTES. *Harris.*

Euchætes egle.

Bombyx egle, Drury, Ill. Ex. Ent. II, p. 36, pl. 20, fig. 3, (1773).

Spilosoma egle, Westwood, Ed. Drury, (1837); Stretch, Ill. Zyg., and Bomb. N. Am. 1, p. 185, pl. 8, fig. 4, ♀, (1874).
Euchætes egle, Harris, Ins. Inj. Veg., p. 257, (1841).
var? *Euchætes eglenensis*, Clemens, Proc. Acad. Nat. Soc. Phil., p. 533, (1860).
United States. B.M.

Euchætes bipunctata.

Halesidota bipunctata, Walker, Lep. Het. 3, p. 738, n. 9, (1855).
Pará, (*J. P. G. Smith*). B.M.

Euchætes oregonensis.

♂. *Euchætes oregonensis*, Stretch. Ill. Zyg., and Bomb. N. Am. 1, p. 187, pl. 8, fig. 7, (1874).
Oregon. Coll. Stretch.

Euchætes collaris.

Hyphantria collaris, Fitch, 3rd. Rep. Ins. N. York, p. 265, (1856).
♂. *Euchætes collaris*, Stretch, Ill. Zyg., and Bomb. N. Am. 1, p. 188, pl. 8, fig. 5, (1874).
Tanada antica, Walker, Lep. Het. 7, p. 1745, n. 1, (1856).
Arctia sciurus, Boisduval, Ann. Soc. Ent. Belg. 12, p. 79, (1868).
Georgia, (*Abbot*). B.M.

Walker's specimen is a small one, and not much like Mr. Stretch's figure, I have no doubt however that it is con-specific.

Tanada conscita of Walker being a *Callimorpha*, I suppose the generic name must be transferred (if adopted) to *Tanada ? amplificata.*

Euchætes elegans.

♂. *Euchætes elegans*, Stretch, Ill. Zyg., and Bomb. N. Am. 1, p. 189, pl. 8, fig. 6, (1874).
California. Coll. Stretch.

This species has a scarlet abdomen.

Euchœtes aurata, n. sp.

Chiefly differs from *E. insulata* of Walker in its deep golden colour, which covers the wings and body uniformly: expanse of wings 1 inch, 6 lines.

Espiritu Santo, (*Higgins*). B.M.

This is so much deeper in colour than any of the varieties of *E. insulata*, that I have considered it necessary to name it.

Euchætes insulata.

Halesidota insulata, Walker, Lep. Het. 3, p. 734, n. 5, (1855).
Jamaica, Haiti, Venezuela, Sta. Martha, Santarem. B.M.

Specimens from the last three localities are paler in colour than those from Jamaica and Haiti.

Euchætes? jussiææ.

Arctia jussiææ, Poey, Centurie de Lép. Cuba, (1832).
Cuba.

The figure of the moth is so poor, that I feel very uncertain as to its systematic position; the palpi are represented as prominent, which is not a character of this genus, but this may be an error in drawing.

Genus PAREUCHÆTES. *Grote.*

Pareuchætes cadaverosa.

Pareuchætes cadaverosa, Grote, Proc. Ent. Soc. Phil. V, p. 245, (1865).
Cuba.

Pareuchætes affinis.

Pareuchætes affinis, Grote, Proc. Ent. Soc. Phil. V, p. 245, (1865).
Cuba.

Genus VANESSODES. *Grote and Robinson.*

Vanessodes clarus.

Vanessodes clarus, Grote and Robinson, Trans. Am. Ent. Soc. III, p. 176, (1871).
Texas.

Genus PYRRHARCTIA. *Packard.*

Pyrrharctia isabella.

Phalæna isabella, Smith and Abbot, Lep. Ins. Georg., p. 131, pl. 66, (1864).
Pyrrharctia isabella, Packard, Proc. Ent. Soc. Phil., p. 121, (1864).
var. *Pyrrharctia californica*, Packard, l. c., (1864).
Trenton Falls, Massachusetts, California? B.M.

I cannot see sufficient reason, in Mr. Packard's comparative description, for separating *P. californica* as a species; it is well known that the *Arctiidæ* are more subject to variation than most groups of Lepidoptera, and may be lighter or darker in colour, or differ slightly in contour, from the same batch of eggs: we have two or three examples labelled with a dark green ticket, (which generally indicates species received by us from California, if not from Europe), one of these is darker and more heavily marked than usual, but I should not hesitate for a moment to place it with *P. isabella.*

Genus SPILARCTIA, *n. gen.*

Chelonia, *Godart*, (restricted).

Spilarctia lubricipeda.

Phalæna-Bombyx lubricipeda, Linnæus, Syst. Nat. II, p. 839, (1766).
Chelonia lubricipeda, Godart, Pap. de France IV, p. 358, pl. 37, fig. 3.
Bombyx lubricipedatus, Haworth, Lep. Brit., p. 110.
Phalæna lepus, Retz. Gen., p. 37, n. 47.
var. *Bombyx radiatus*, Haworth, Ent. Trans. 1, p. 336.
var. *Bombyx Luxerii*, Godart, Pap. de France IV, p. 360, pl. 37, fig. 4.
Europe, (*Becker*). B.M.

Spilarctia flavalis.

Spilosoma flavalis, Moore, Proc. Zool. Soc., p. 809, (1865).
Darjeeling, (*A. E. Russell*). Coll. F. Moore.

Spilarctia punctata.

Spilosoma punctata, Moore, Cat. Lep. Mus., E. I. C. II, p. 355, n. 854, (1858–9).
Java, (*Horsfield*). B.M.

Spilarctia indica.

Arctia indica, Guérin, Voy. Delessert, Hist. Nat., p. 93, (1843).
Neilgherries.

Apparently allied to *S. lubricipeda*, but much more spotted.

Spilarctia sub-fascia.

Spilosoma sub-fascia, Walker, Lep. Het. 3, p. 678, n. 33, (1855).
Ceylon, (*Templeton*). B.M.

Spilarctia stigmata.

Spilosoma stigmata, Moore, Proc. Zool. Soc., p. 809, (1865).
Darjeeling, (*Atkinson*). B.M.

Spilarctia multivittata.

Spilosoma multivittata, Moore, Proc. Zool. Soc., p. 808, (1865).
Darjeeling, (*Atkinson*). B.M.

Spilarctia rhodophila.

Spilosoma rhodophila, Walker, Lep. Het. supp. 1, p. 294, (1864).
? Spilosoma rubidorsa, Moore, Proc. Zool. Soc., p. 808, (1865).
Darjeeling, (*Atkinson*). B.M.

Spilarctia lativitta.

Spilosoma lativitta, Moore, Proc. Zool. Soc., p. 809, (1865).
Darjeeling, (*Atkinson*). B.M.

This species appears to be nearly allied to *S. rhodophila* of Walker, but the thorax is more woolly, and the primaries are narrower than in any other species of this genus.

Spilarctia? cognata.

Spilosoma cognata, Walker, Charact. Lep. Het., p. 11, (1869). Hab?

Mr. Walker could hardly have chosen a less appropriate name for this species: in publishing descriptions of so many Lepidoptera from Norris' and other collections, nearly all without localities, this author unnecessarily burdened the synomymy with scores of names, the species referable to which will most of them probably never be cognate.

Spilarctia obliqua.

Spilosoma obliqua, Walker, Lep. Het. 3, p. 679, n. 34, (1855). ♀, Sydney, ♂, ♀, New South Wales. B.M.

Spilarctia nydia, n. sp.

Cream coloured, abdomen crimson, with dorsal and lateral series of black spots; primaries with a black spot near base of submedian nervure, and two or three in an oblique series from the internal margin beyond the middle of the wing; secondaries with a black spot at end of cell, three large black spots placed obliquely towards anal angle, and two smaller apical submarginal spots; upper surface of palpi and femora, coxæ and anterior margin of thorax, carmine; frons, tips of palpi, tibiæ, and tarsi, dark brown; venter with lateral series of black spots; primaries with a large black spot at end of cell, and an oblique streak from inner margin to near apex; secondaries as above: expanse of wings 2 inches, 5 lines.

Nepal. B.M.

Spilarctia ione, n. sp.

♀. Creamy-white, abdomen rosy, with dorsal and lateral blackish dots, anal segments ochraceous; antennæ black; secondaries with a small black spot at end of cell, a second smaller, on discoidal interspace towards outer margin, and two near anal angle; frons, tips of palpi, tibiæ and tarsi black-brown; anterior lateral margin of pectus and femora, carmine; venter with a few lateral blackish points; primaries below with a blackish spot at end of cell, a few dots near apex, an oblique streak from interno-median to discoidal interspace, and a nebulous longitudinal interno-median patch, greyish brown; secondaries with the blackish spots less distinct than above: expanse of wings 1 inch, 10 lines.

Hakodadi, Japan, (*Whitely*). B.M.

This and the preceding species are allied to *C. subcarnea*, they were placed by Mr. Walker with his *S. suffusa.*

Spilarctia subcarnea.

Spilosoma subcarnea, Walker, Lep. Het. 3, p. 675, n. 25, (1855).

Hong-Kong, (*Bowring*). B.M.

Spilarctia abdominalis.

Spilosoma abdominalis, Moore, Cat. Lep., E. I. C. 2, p. 356, n. 857, (1858–9).

N. India, (*Buckley*).

Appears to be allied to the preceding species.

Spilarctia sordida.

Spilosoma sordida, Moore, Proc. Zool. Soc., p. 808, (1865).

Darjeeling. Coll. A. E. Russell.

Spilarctia ? brunnea.

Spilosoma brunnea, Moore, Proc. Zool. Soc., p. 574, (1872).

Bombay. Coll. F. Moore.

Spilarctia ? todara.

Spilosoma todara, Moore, Proc. Zool. Soc., p. 574, (1872).

Coonoor, Nilghiris, (*Day*). Coll. F. Moore.

Spilarctia dentilinea.

Spilosoma dentilinea, Moore, Proc. Zool. Soc., p. 573, (1872).

Sikkim. Coll. F. Moore.

Seems allied to *C. bifrons.*

Spilarctia confusa, n. sp.

♂, ♀. Whity-brown, or dull cream coloured; abdomen crimson, with dorsal and lateral series of black dots; antennæ black; primaries with a curved oblique series of black dots from inner margin to beyond end of cell; several submarginal discal black dots, (sometimes forming a zigzag series to apex); secondaries deeper coloured than primaries, tinted with rose colour, especially towards inner margin, a black spot at end of cell; a black submarginal spot on discoidal interspace, and two or three towards anal angle, zoned with creamy whitish; primaries below, especially of the male suffused with rose-red, a black spot at end of cell; apex pale; secondaries paler than above, very slightly tinted with pink; a black spot at end of cell; female with other black spots as above: palpi red with brown tips, coxæ and upper surface of femora carmine, tibiæ and tarsi partially brown; venter creamy with a few lateral black dots: expanse of wings, ♂ 1 inch, 7 to 10 lines; ♀ 2 inches, to 2 inches 2 lines.

N. India, N. Bengal, &c. B.M.

Spilarctia rubitincta.

Spilosoma rubitincta, Moore, Proc. Zool. Soc., p. 809, (1865).
Spilosoma subtincta, Walker, Lep. Het. supp. 5, p. 1907, (1866).

Darjeeling, (*A. E. Russell*). Coll. F. Moore.

The description of this species is incomplete, but it appears to be allied to *S. suffusa* of Walker: we have a species nearly agreeing with the description from Japan.

Spilarctia bifrons.

Aloa bifrons, Walker, Lep. Het. 3, p. 705, n. 9, (1855).
N. China, (*Cuming and Fortune*). B.M.

Spilarctia suffusa.

Spilosoma suffusa, Walker, Lep. Het. 3, p. 677, n. 32, (1855).
Punjaub, (*Hearsay*). B.M.

Spilarctia casigneta.

Spilosoma casigneta, Kollar, Hügel's Kaschmir, p. 469, n. 8, (1844).
Spilosoma sanguinalis, Moore, Proc. Zool. Soc., p. 810, (1865).
Darjeeling, (*Atkinson*). B.M.

Spilarctia discinigra.

Spilosoma discinigra, Moore, Proc. Zool. Soc., p. 810, (1865).
Darjeeling. Coll. A. E. Russell.

Spilarctia rubilinea.

Spilosoma rubilinea, Moore, Proc. Zool. Soc., p. 810, (1865).
Darjeeling, (*Atkinson*). B.M.

Genus LEUCALOA, *n. gen.*

Allied to *Spilarctia*, more robust, head and tegulæ more smoothly scaled, not so fluffy; antennæ thicker, palpi thicker; front pair of legs much less hairy, all the legs stouter and smoother; wings below fluffy towards the base; discocellulars of all the wings strongly and regularly angulated; markings of primaries transverse, linear. Type *Spilosoma eugraphica* of Walker.

Leucaloa eugraphica.

Spilosoma eugraphica, Walker, Lep. Het. supp. 1, p. 292,
Aloa undistriga, Felder, Reise der Nov. Lep. 4, pl. C, fig. 21, (1874).
Cape of Good Hope. B.M.

Leucaloa curvilinea.

Spilosoma curvilinea, Walker, Lep. Het. 3, p. 671, n. 14, (1855).
Congo, (*Richardson*). B.M.

I feel doubtful whether the following genus really belongs to this group, although Dr. Wallengren has placed it here.

Genus TÆNIOPYGA. *Wallengren.*

Tæniopyga eumela.

Phalæna eumela, Cramer, Pap. Exot. IV, pl. 347, fig. G, (1782).
Tæniopyga eumela, Wallengren, Kongl. Svenska. Vetensk. Akad. Handl., 5, p. 50, n. 1, (1865).
S. Caffraria.

Ovios sylvina appears to me to be allied to this species.